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ABSTRACT OF THE DISCLOSURE

It is made possible to promptly determine an accurate parting line. Two-dimensional projection means produces two-dimensional projection data by projecting edges of a product shape represented by three-dimensional graphic data onto a plane perpendicular to a mold opening direction. Parting line determination means sequentially determines, out of candidate edges contiguous to a determined parting line already determined as parting line, a candidate edge forming a largest interior angle with the determined parting line at a contact point therewith on the two-dimensional projection data, as the parting line. This makes it possible to determine a parting line of a mold for molding the product shape represented by the three-dimensional graphic data.